

What is claimed is:

1. An IC card comprising:

an IC module which comprises an IC chip mounted on an  
5 insulating substrate having an antenna coil, and a chip  
reinforcing plate provided on at least an IC mounted surface  
of said insulating substrate; and

a core layer comprising a plurality of sheet materials  
having said IC module disposed therebetween,

10 wherein, in said plurality of sheet materials, at least  
the sheet materials adjacent to said IC module have a through  
hole for containing therein said IC chip, formed in a region  
corresponding to an IC mounted portion of said IC module,

wherein a relationship  $A = (B1 + C1) \pm 30 \mu\text{m}$  is satisfied,  
15 where A ( $\mu\text{m}$ ) represents the sum of heights of said through  
holes, B1 ( $\mu\text{m}$ ) represents a projection height on an IC  
mounted surface of said IC module, and C1 ( $\mu\text{m}$ ) represents  
a projection height on an IC non-mounted surface of said  
IC module.

20

2. The IC card according to claim 1, wherein a relationship  
 $(B1 + C1) - 20 \mu\text{m} \leq A \leq (B1 + C1) + 10 \mu\text{m}$  is satisfied.

25

3. The IC card according to claim 1, wherein a relationship  
B =  $B1 \pm 30 \mu\text{m}$  is satisfied where B ( $\mu\text{m}$ ) represents a height  
of said through hole on the side of the IC mounted surface  
of said IC module.

30

4. The IC card according to claim 1, wherein a relationship  
C =  $C1 \pm 30 \mu\text{m}$  is satisfied where C ( $\mu\text{m}$ ) represents a height  
of said through hole on the side of the IC non-mounted surface

of said IC module.

5. The IC card according to claim 1, wherein a relationships  
B =  $B1 \pm 30 \mu\text{m}$ , and C =  $C1 \pm 30 \mu\text{m}$  are satisfied where B ( $\mu\text{m}$ )  
5 represents a height of said through hole on the side of the  
IC mounted surface of said IC module, and C ( $\mu\text{m}$ ) represents  
a height of said through hole on the side of the IC non-mounted  
surface of said IC module.

10 6. The IC card according to claim 1, wherein said plurality  
of sheet materials constituting said core layer comprise at  
least a pair of inner core sheets adjacent to said IC module,  
and an outer core sheet stacked on at least one of said pair  
of inner core sheets.

15 7. The IC card according to claim 1, wherein said core layer  
has a rewritable display layer formed on at least one surface  
of said core layer.

20 8. The IC card according to claim 1, wherein, in said sheet  
materials constituting said core layer, at least a pair of  
sheet materials having said IC module disposed therebetween  
includes a material comprising a copolymer of terephthalic  
acid, cyclohexanedimethanol and ethylene glycol, and  
25 polycarbonate.

9. The IC card according to claim 1, wherein said sheet  
materials constituting said core layer comprise a  
no-chlorine-containing material.

30

10. An IC card comprising:

an IC module which comprises an IC chip mounted on an insulating substrate having an antenna coil, and a chip reinforcing plate provided on at least an IC mounted surface of said insulating substrate; and

5 a core layer comprising a plurality of sheet materials having said IC module disposed therebetween,

wherein, in said plurality of sheet materials, at least the sheet materials adjacent to said IC module have a through hole for containing therein said IC chip, formed in a region  
10 corresponding to an IC mounted portion of said IC module,

wherein a relationships  $B = B1 \pm 30 \mu\text{m}$ , and  $C = C1 \pm 30 \mu\text{m}$  are satisfied,

where  $B1 (\mu\text{m})$  represents a projection height on an IC mounted surface of said IC module,  $C1 (\mu\text{m})$  represents  
15 a projection height on an IC non-mounted surface of said IC module,  $B (\mu\text{m})$  represents a height of said through hole on the side of the IC mounted surface of said IC module, and  $C (\mu\text{m})$  represents a height of said through hole on the side of the IC non-mounted surface of said  
20 IC module.

11. The IC card according to claim 10, wherein a relationship  $A = (B1 + C1) \pm 30 \mu\text{m}$  is satisfied where  $A (\mu\text{m})$  represents the sum of heights of said through holes.  
25

12. The IC card according to claim 10, wherein a relationship  $(B1 + C1) - 20 \mu\text{m} \leq A \leq (B1 + C1) + 10 \mu\text{m}$  is satisfied.

13. The IC card according to claim 10, wherein said plurality  
30 of sheet materials constituting said core layer comprise at least a pair of inner core sheets adjacent to said IC module,

and an outer core sheet stacked on at least one of said pair of inner core sheets.

14. The IC card according to claim 10, wherein said core  
5 layer has a rewritable display layer formed on at least one surface of said core layer.

15. The IC card according to claim 10, wherein, in said sheet materials constituting said core layer, at least a pair of  
10 sheet materials having said IC module disposed therebetween comprise a material comprising a copolymer of terephthalic acid, cyclohexanedimethanol, and ethylene glycol and polycarbonate.

15 16. The IC card according to claim 10, wherein said sheet materials constituting said core layer comprise a no-chlorine-containing material.